

The attached Gartner Research Note provides an overview of the DoD ESI role in the Department's ITAM efforts including the implementation approach, critical success factors and lessons learned.

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## **DOD's IT Asset Management Initiative Saves Money and Improves Mission Support**

**The U.S. Department of Defense Enterprise Software Initiative has saved the DOD more than \$2 billion and improved mission support. To manage risks, contain costs and maximize operational efficiencies, emulate the ESI's integrative approach to ITAM.**

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### **Core Topics**

Government: Domain-Based Government  
Technology

IT Management: IT Asset Management

### **Key Issues**

What technology issues will be important in administration of government?

What technology issues will be important to national security?

### **Strategic Planning Assumptions**

Enterprises that systematically manage the life cycle of their IT assets will reduce the cost per asset by as much as 30 percent in the first year, and between 5 percent and 10 percent annually during the next five years (0.8 probability).

By 2009, more than half of North Atlantic Treaty Organization (NATO) and Australia, New Zealand and United States (ANZUS) Treaty member defense organizations will have initiated an IT asset management program (0.9 probability).

### **Note 1**

#### **DOD's IT Budget and Scope**

The DOD IT budget for fiscal 2005 is \$28.7 billion. Funding initiatives include business applications, national security systems, shared infrastructure, and information assurance and related activities. During the next five years, the DOD estimates that it will invest more than \$12 billion on commercial software and related services.

The U.S. defense establishment has more than 3.35 million active-duty, reserve military personnel and DOD civilian employees among the four military services (Army, Air Force, Navy and Marines), 16 defense agencies and seven field activities. The DOD operates in more than 6,000 locations in 146 countries.

A well-managed IT asset life cycle program provides the data needed to strategically manage IT assets, from planning through acquisition, maintenance and disposal. Enterprises that systematically manage the life cycle of their IT assets will reduce the cost per asset by as much as 30 percent in the first year, and between 5 percent and 10 percent annually during the next five years (0.8 probability). (See "Use IT Asset Management to Mitigate Enterprise Risks" and "Predicts 2005: IT Asset Management Adds Value, Lessens Risk" for more information on IT asset life cycle management.)

The U.S. Department of Defense (DOD) is the largest IT buying center in the U.S. federal government (see Note 1). Until 1998, the DOD's commercial IT procurement was largely uncoordinated, and its IT asset management (ITAM) practices were inconsistent. With many organizations executing purchases independently and applying a variety of project and ITAM practices, the DOD realized that it was not optimizing its buying power, maximizing its investments or effectively managing risks.

To address these deficiencies, in 1998, the DOD CIO established the Enterprise Software Initiative (ESI) as a limited joint project that involved the military services and defense agencies. The ESI's initial purpose was to negotiate software purchases and software maintenance contracts, and develop a software asset management (SAM) process within the DOD. By 2001, the ESI had realized considerable progress on its goals, earning the program the endorsement of the DOD's Business Initiative Council, which is composed of the DOD's senior leaders. As a result, the Council asked the ESI to streamline the DOD's IT acquisition process by providing best-priced, standards-

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compliant software products to the DOD. The program also expanded to include IT hardware and selected services.

**Problem:** Similar to many private and government organizations, the DOD often procured commercial IT products and related services on an irregular basis, in variable quantities and through multiple purchasing agents. Although the military services and agencies had pooled some purchases and had shared information on market and vendor behaviors and related best practices, the DOD had missed the opportunity to realize the substantial efficiencies and economies that a more-disciplined approach could offer.

**Objective:** To overcome these weaknesses, the DOD established the ESI to leverage its buying power for commercial IT products and services, and to introduce best practices and repeatable processes to acquire, distribute and manage its IT assets. To meet its mandate and build on its progress, the ESI's goals were to:

- Establish a collaborative and "lean but effective" governance structure for ITAM
- Implement an agencywide strategy that aligned with the DOD's mission and business objectives
- Develop well-thought-out processes and routines that would be reinforced by DOD policy
- Secure funding for ITAM initiatives, including access to the DOD Working Capital Fund for consolidated procurements
- Establish and maintain an online workbench of methods and tools that would serve as the foundation of DOD's overall ITAM effort

**Approach:** With the sponsorship of the DOD CIO and the Defense CIO Executive Board (which includes representatives from each military service and many defense agencies), the ESI was organized as a collaborative endeavor to leverage the DOD's IT buying centers through a matrixed organization operating under the auspices of ESI.

Governance is a critical component to establishing the initiative across defense agencies. The DOD CIO Executive Board exercises high-level oversight of the ESI's overall plans and functions, and it contributes key personnel and resources to accomplish requisite tasks. The ESI Steering Group is chaired by the deputy DOD CIO, and it includes IT and procurement executives from key stakeholder organizations that constitute the second-tier governance structure. The ESI Steering Group has operational oversight and provides guidance and assistance

when problems and program anomalies occur. The DOD CIO also established a small but effective program management office that coordinates the efforts of program participants, and documents the processes and practices that the ESI developed for the DOD.

The operational foundation of ESI focuses on the ESI Working Group (ESIWG), which has 12 members (senior IT and acquisition professionals) who are assigned to and represent key stakeholders among DOD components. The ESIWG is led by two co-chairpersons who are selected by the DOD CIO. To develop a framework for operations, the ESIWG benchmarked leading practices and collaborated with public- and private-sector organizations that have instituted ITAM practices. To better understand vendor motivation and market behaviors, the ESIWG spoke with outsourcers, vendors and resellers that sell IT products and services to the DOD. With this information, the ESIWG developed and implemented an ITAM program that is still evolving.

The ESI is an integrated effort that involves people, processes and technologies.

#### Note 2

##### ESI Product Categories and Responsible Organizations

Business Modeling Tools (Army)  
Collaborative Tools (Army)  
Database Management (Army)  
Desktop Hardware and Peripherals (Air Force [Commodity Council] Pilot Initiative)  
Enterprise Architecture Tools (Army)  
Enterprise Management (Air Force)  
Enterprise Resource Planning (Navy)  
Information Assurance Tools (Air Force)  
Office Systems (Navy)  
Operating Systems (Defense Information Systems Agency)  
Records Management (Air Force)  
Research and Advisory Services (Navy)  
Section 508 Tools (Navy)  
Systems Integration Services (Navy)

- **Product software managers:** The ESIWG worked with DOD stakeholders to identify the product categories most appropriate for the DOD's needs (see Note 2). Each DOD component (buying agent) is responsible for managing a product category and providing a designated product software manager. This manager is the DOD's purchasing principal negotiating voice for that category, and he or she communicates with vendors, resellers and service providers. The product software manager also communicates with government agencies to identify and consolidate procurement and maintenance requirements, and he or she elicits and receives feedback on processes and fulfillment. The manager defines and executes the DOD's negotiating strategy for enterprise software agreements (ESAs); schedules and manages purchases; and monitors and measures performance-related fulfillment of procured products and services.
- **SAM framework:** The ESI developed and implemented a framework that contains procedures, policies, training and technologies that are intended to capture and integrate the physical, financial and contractual data of software assets. The SAM framework is designed to support and optimize software portfolio management, and thus enhance interoperability, improve software compliance and facilitate software redistribution. The ESI is implementing a permission-based Web site for the SAM framework.

- **ESAs:** These agreements (which now include hardware, software and services) are defined contracts or blanket purchase agreements that are used by the DOD to acquire standards-compliant IT products and services. The use of these pre-negotiated agreements is open to all DOD groups, other selected agencies and authorized defense contractors. Discount prices on products and services range from 4 percent to 95 percent off the published U.S. General Services Administration (GSA) — General Schedule.
- **Systems integration service enterprise agreements (SISEAs):** SISEAs are performance-based contracts for configuration, integration, installation, data conversion and other professional services for commercial software implementations. A key objective in employing SISEAs is to provide DOD organizations with an opportunity to reduce the government's average implementation-to-software cost ratio — currently 15-to-1 — to a ratio that is nearer the industry average of 5-to-1. DOD estimates that by pursuing this objective, annual cost avoidance by the DOD could be \$160 million to \$800 million over a five-year period.
- **Enterprise Integration Toolkit:** The Web-based Enterprise Integration Toolkit provides project road maps for common projects, tools, templates of sample business cases, requests for proposals, contracts, status reports and checklists that DOD organizations can use for their IT projects. The toolkit also maintains common software objects that DOD organizations can use to interface enterprise resource planning (ERP) software with other DOD systems. If an object has been developed by a DOD organization, another DOD organization can use it for its operations. The DOD reports that this reuse has resulted in considerable savings, because the budgeted costs of an ERP project typically factor up to 4 percent of the total cost of interface software objects.
- **The ESI Web site:** The site is designed to be the authoritative source of ESI information. It provides basic ESI program information, guidance on relevant policies and regulations, and product information on more than 7,000 products from more than 30 software publishers. The Web site also has features for communications between customers and product software managers, and it is a repository for metrics collection and analysis.
- **Virtual IT Marketplace:** This Web site provides ESI participants with access to the GSA's Advantage!, which is an integrated e-commerce solution for IT software, hardware and service purchases.

**Results:** Although it is still evolving, the DOD's ESI illustrates an effective application of leading ITAM practices in a public-sector enterprise. As the DOD's benchmark IT procurement strategy, the ESI has established:

- **A comprehensive ITAM strategy:** The ESI's procurement and asset management strategy incorporates leading practices, the institutionalization of repeatable processes and the creation of defense-agency-wide policies that will govern the program's viability over time.
- **An effective negotiating team:** The ESI's product software managers have developed expertise in their respective areas and established rapport with their vendor communities. Each is the DOD's only negotiating voice to the market regarding enterprise procurement and asset management for a product.
- **A stable operating budget:** The ESI leverages the DOD's Working Capital Fund to secure short-term bridge funding for purchases executed through the program (on a reimbursable basis to the fund). This enables a larger number of participants to take advantage of scheduled purchases, even if funds are not immediately available. Access to working capital facilitates more-rational buying behaviors during the fiscal year and makes scheduled buying the norm rather than the exception.
- **Repeatable processes and a Web-enabled SAM framework:** The ESI has documented repeatable processes for the acquisition, deployment, tracking and retirement of software assets, in close collaboration with DOD stakeholder organizations. These processes, as well as tools and templates, are accessible via the ESI's Web-enabled framework.

The ESI manages purchases in 11 product categories that include more than 7,000 products from more than 30 software publishers and service providers. The DOD has realized volume discounts ranging from 4 percent to 95 percent by providing a more rational approach to procurement and a single negotiating voice to the market. The ESI has been credited with achieving more than \$2 billion in cost avoidance for the DOD since its inception. It is recognized as the DOD's "benchmark acquisition strategy."

**Critical Success Factors/Lessons Learned:** The ESI initially had limited objectives, but it evolved significantly to meet user goals and improve operational efficiency. Thus, it has met a broader set of DOD objectives. As the DOD increasingly relies on commercial IT products for many of its business needs, ITAM will play an ever-increasing role in how the DOD manages risk,

contains cost and maximizes operational efficiency (see "Why IT Asset Management Is Important Now"). To the DOD, this initiative is as timely as it is promising.

Early in the project, the DOD realized that there is no "one size fits all" model for establishing an ITAM framework. The ESI is not only changing how DOD organizations acquire, distribute and manage IT assets, it is also changing customer buying behaviors and vendor business models. Thus, understanding and considering customer and vendor motivations are as important to managing IT procurement as they are to effectively managing IT assets and related contract services.

ITAM initiatives probably will require knowledge and skills not extant within the organization. A key lesson that the DOD learned was that software use rights are fundamentally different from the use rights of other assets. Organizations must develop the expertise to manage these rights effectively (see "Clearly Define Software License Usage Rights").

ITAM is a long-term investment in operating efficiency, and thus it requires management commitment, operational support and stakeholder buy-in to succeed.

**Bottom Line:** IT asset management's long-term value resides in its ability to manage change, optimize IT asset use, take control of the technology stream and mitigate risks. As the U.S. Department of Defense Enterprise Software Initiative demonstrates, effective ITAM can significantly improve mission support and cost avoidance.

**Acronym Key**

<b>ANZUS</b>	Australia, New Zealand and United States
<b>DOD</b>	Department of Defense (United States)
<b>ERP</b>	enterprise resource planning
<b>ESA</b>	enterprise software agreement
<b>ESI</b>	Enterprise Software Initiative (DOD)
<b>ESIWG</b>	Enterprise Software Initiative Working Group (DOD)
<b>GSA</b>	General Services Administration (United States)
<b>ITAM</b>	IT asset management
<b>NATO</b>	North Atlantic Treaty Organization
<b>SAM</b>	software asset management
<b>SISEA</b>	systems integration service enterprise agreements